

CURRICULUM VITAE**NAME:**

E. Juhani Jänne

BORN:

October 16, 1941 (Kotka, Finland)

PROFESSIONAL ADDRESS:

A.I. Virtanen Institute
University of Kuopio
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Finland
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EDUCATION:

Graduated from Helsingin lyseo High School 1960
Candidate of Medicine, University of Helsinki 1963
Licentiate of Medicine (M.D., qualifying examination), University of Helsinki 1966
Doctor of Medicine and Surgery (Doctor of Medical Sciences, Medical Chemistry), University of Helsinki 1967
Docent of Medical Chemistry (Senior Lecturer), University of Helsinki 1971-1974

PROFESSIONAL EXPERIENCE:

Junior Instructor, Department of Medical Chemistry, University of Helsinki 1964-1967
Senior Instructor, Department of Medical Chemistry, University of Helsinki 1967-1972
Visiting Scientist, The Ben May Laboratory for Cancer Research, University of Chicago 9/1969-5/1971
University Lecturer, Department of Medical Chemistry, University of Helsinki 1972-1974
Acting Associate Professor of Medical Chemistry, University of Helsinki 8/1972-11/1972
Acting Associate Professor of Biochemistry, University of Kuopio 1/1973-2/1973

Acting Professor of Biochemistry, University of Kuopio 3/1973-9/1973

Associate Professor of Biochemistry, University of Helsinki 1974- 1988

Acting Professor of Biochemistry and Chairman of the Department of Biochemistry, University of Helsinki 1/1978-2/1981

Visiting Professor, Department of Biochemistry, University of Washington, Seattle 3/1983-5/1983

Acting Professor and Chairman of the Department of Biochemistry, University of Helsinki 7/1985-6/1986

Visiting Scientist, Siberian Branch of U.S.S.R. Academy of Sciences, Novosibirsk, U.S.S.R. 5/1986-6/1986

Acting Professor of Biochemistry, University of Helsinki 1986-1987

Part-time Medical Director of Ciba-Geigy Finland 1972-1988

Professor of Biotechnology and Vice Chairman of the Department of Biochemistry, University of Kuopio 1988-1989

Professor of Biotechnology and Chairman of the Department of Biochemistry & Biotechnology, University of Kuopio 1989-1991

Director of A.I. Virtanen Institute, University of Kuopio, 1990- 1991; 1993-present

Member of the Board of A.I. Virtanen Institute 1990-; Director of the Board of A.I. Virtanen Institute, University of Kuopio 1991-1993

Member of The Board of FinnGene Ltd 1993-1995; Chairman of the Board of FinnGene Ltd 1993-1994

RESEARCH INTEREST:

Metabolism and physiological functions of the natural polyamines (putrescine, spermidine and spermine) with special emphasis to the molecular genetics of their biosynthetic enzymes

Production of transgenic animals

Biochemistry of cell proliferation and action of antiproliferative agents

Biochemistry of hormone action

EDITORIAL DUTIES:

Editorial Advisor for the *Biochemical Journal* 1987-1991

Member of Editorial Board, *Annals of Medicine: Cellular and Molecular Biology Research*

Reviewer for:

Acta Chemica Scandinavica, Ser. B

Acta Physiologica Scandinavica

Annales of Medicinac Experimentalls et Biologiae Fenniae (Medical Biology)

Annals of Medicine

Biochemical Pharmacology

Biochemistry

Bioclinica et Biophysica Acta

Biology of the Cell (*Biologie Cellulaire*)

British Journal of Cancer

Cancer Journal

Chemico-Biological Interactions

Developmental Biology

Duodecim

EMBO Journal

European Journal of Cancer and Clinical Oncology

Experimental Cell Research

FEBS Letters

Gastroenterology

International Journal of Andrology

International Journal of Cancer

Journal of Cell Biology

Journal of Enzyme Inhibition

Journal of Hepatology

Journal of Reproduction and Fertility

Life Sciences

Molecular Pharmacology

Pediatric Research

Scandinavian Journal of Clinical and Laboratory Investigation

Foundations

Chairman of the Basic Research Evaluation Committee, Finnish Foundation for

Cancer Research 1992-
Reviewer for National Science Foundation (U.S.A.)

MEMBERSHIPS AND AWARDS

*Member of Finnish Academy of Science and Letters 1993-
Matti Äyräpää Price of the Finnish Medical Society Duodecim 1994
Kuopio Price of the city of Kuopio 1994*

MAJOR GRANT SUPPORT

Principal Investigator, WHO Task Force for Human Reproduction 1973-1976

Co-Investigator, Ford Foundation, Clinical and Metabolic Approaches
for Specific Male and Female Fertility Control 1977-1980

Principal Investigator, Finnish Foundation for Cancer Research,
Molecular Mechanisms of Cell Proliferation in Normal and Malignant Growth
1979-1981

Principal Investigator, The Population Council, A Study of the Use
of Coasypol as Spermicide 1980-1981

Principal Investigator, The National Research Council for Natural Sciences
(Academy of Finland):

Regulation of Gene Expression in Eukaryotes 1977; Inhibition of Polyamine
Biosynthesis in Rapidly Growing Tissues 1978; Role of Polyamines in Cell
Proliferation 1979; Antimetabolites of Polyamines as Regulators of Cell Proliferation
1980-1983 (Research Agreement); The Biosynthetic Enzymes of the Polyamines:
From Molecular Biology to Clinical Applications 1984-1988; Human ODC Gene:
Structure and Regulation, Use in Amplifiable Animal Cell Vectors and Transfer to
Transgenic Animals 1989-1991 (research agreement); Transgenic mice: use as molecular
biology models for diseases and as models for transgenic bioreactors 1992-1994
(research agreement); Dairy cattle and rabbit as transgenic production animals 1994-
1996; Production of transgenic and gene disrupted rodents as disease and bioreactor
models (The Genome Research Program) 1994-1997

Principal Investigator, National Cancer Institute (U.S.A.), Second Generation
Inhibitors of Polyamine Biosynthesis (IRO1 CA37695) 1985-1988

Principal Investigator, Finnish Foundation for Cancer Research,
Human ODC gene from Tumor Cells: Structure, Amplification, Transfection and
Transfer to Transgenic Animals 1989-1991; Transgenic mice overexpressing human

ONC. 1992: Transgenic rodents as molecular biology models for carcinogenesis 1993

Principal Investigator, Ministry for Agriculture and Forestry,
Production of transgenic cattle 1990-1993

Principal Investigator, Ministry of Education, Generation of transgenic
production animals 1993-1994

**PARTICIPATION AS INVITED SPEAKER AT INTERNATIONAL SCIENTIFIC
MEETINGS:**

National Cancer Institute (U.S.A.) Symposium on "Polyamines in Normal and
Neoplastic Growth", Baltimore, U.S.A. 1972

Ninth International Congress of Gastroenterology Symposium on "La
Regeneration Hepatique", Paris, France 1972

Third Linderström-Lang Conference on "Regulation of Cell Growth",
Espoo, Finland 1973

Third Workshop on "Experimental Liver Injury", Freiburg, West Germany 1973

International Symposium on "Molecular Control of Proliferation in
Eukaryotic Cells" Dobogoko, Hungary 1977

11th FEBS Meeting, Colloquium on "Growth Factors" Copenhagen,
Denmark 1977

Gordon Research Conference on Polyamines, Meriden NH, U.S.A. 1977

Gordon Research Conference on Polyamines Meriden NH, U.S.A. 1979

Workshop on "Current Issues in Polyamine Research" New London NH,
U.S.A. 1979

International Symposium on "Polyamines in Normal and Neoplastic
Growth" Rimini, Italy 1980

Gordon Research Conference on Polyamines, Meriden NH, U.S.A. 1981

11th Linderström-Lang Conference on "Polyamines as Cellular
Regulators" Espoo

Finland 1981

Bat-Sheva Seminar on "Polyamines in Growth and Differentiation Process" Jerusalem
Israel 1982

Gordon Research Conference on Polyamines, Meriden NH, U.S.A. 1983

International Conference on Polyamines, Budapest, Hungary 1984

International Conference on "Polyamines: Basic and Clinical Aspects"
Gifu, Japan 1984

Symposium on "Polyamines and Their Function in Prokaryotic and
Eucaryotic Cells" Buenos Aires, Argentina 1984

International Symposium on "Polyamines: From Molecular Biology
to Clinical Applications" Espoo, Finland 1985 (Chairman of the Symposium)

International Tübingen Conference on "Enzyme Pattern-Targeted Chemotherapy" Tübingen,
West-Germany 1985

Symposium on "Molecular Genetics" Helsinki, Finland 1985

Gordon Research Conference on Polyamines, Meriden NH, U.S.A. 1985

International Symposium on: "Present Stage and Perspectives of Inhibitors of
Nucleic Acids and Protein Synthesis" Varna, Bulgaria 1985

International Symposium on "Role of Oncogenes in Human Cancer"
Helsinki, Finland 1986

International Conference on "Polyamines in Life Sciences" Lake Yamanaka, Japan
1986

International Symposium on "Polyamines in Biology and Medicine"
Milan, Italy 1987

Gordon Research Conference on Polyamines, New London NH, U.S.A. 1987

International Symposium on "Polyamines in Biochemical and Clinical Research"
Sorrento, Italy 1988

7

Twenty-Eighth Symposium on "Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues" Indianapolis, IN, U.S.A. 1988

International Symposium on Biology and Chemistry of the Polyamines. Buenos Aires, Argentina 1989

Gordon Research Conference on Polyamines, Newport, RI, U.S.A. 1989

Symposium on Polyamines: Biological and Clinical Aspects, Albergo di Tenna (Trento), Italy 1990

17th Meeting of European Study Group for Cell Proliferation, Espoo, Finland 1990

International Symposium on Polyamines in Molecular and Medical Biology, Kyoto, Japan 1990

International Helsinki 1991 Symposium on Frontiers of Patent Law, Helsinki, Finland 1991

International Symposium on Recent Advance in Chemistry and Molecular Biology of Cancer Research, Beijing, China 1991

International Symposium on Polyamines in the Gastrointestinal Tract, Tübingen, Germany 1991

Course on Transgenic Animals, Helsinki, Finland 1991

Transgenic animals as experimental tools, Turku, Finland 1992

International Symposium on Polyamines in Cancer, Houston, TX, U.S.A. 1992

Modern Biotechnological Tools in Industrial Research & Development: Medical Applications of Modern Biotechnology (moderator), Kuopio, Finland 1993

The second workshop of the EEC AIR Concerted Action Programme on Polyamines in Food- Consequences for Food Quality and Human Health, Utrecht, The Netherlands 1993

Laboratory Animals in Biomedical Research, Tartu, Estonia 1994

Modern Biotechnological Tools in Industrial Research & Development;
Medical Applications of Modern Biotechnology, Basel, Switzerland
1994

Polyamines: Biological and Clinical Aspects, Albere' di Tenna, Italy
1994

Neuroscience 1994 Finland, Kuopio, Finland 1994

IV Conference of Baltic Laboratory Animal Science Association, Tallinn, Estonia,
1994

Fifth AIR Workshop on Polyamines in Food, Paris, France, 1995

XIII Helsinki University Course in Drug Research, Helsinki, Finland,
1995

A.J. Virtanen Centennial Symposium, The Frontiers of Contemporary
Science, Kuopio, Finland, 1995

Gordon Research Conference on Polyamines, Meriden, N.H., U.S.A.,
1995

Frontiers of Laboratory Animal Sciences, Helsinki, Finland, 1995

FORMAL INTERNATIONAL SEMINARS GIVEN.

Department of Endocrinology, The Milton S. Hershey Medical Center,
Hershey U.S.A. 1974

World Health Organization, Geneva Switzerland 1975

Department of Biochemistry, University of Stirling, Stirling U.K. 1977

Centre de Recherche Merrell International, Strasbourg France 1977

Department of Zoophysiology, University of Lund, Lund, Sweden 1979

Friedrich Miescher Institute, Basle, Switzerland 1979

The Ben May Laboratory for Cancer Research, University of Chicago.

9

Chicago, U.S.A. 1981

Merrell Research Center, Cincinnati, U.S.A. 1981

Roswell Park Memorial Institute, Buffalo, U.S.A. 1983

Brain Tumor Research Center, University of California, San Francisco, U.S.A. 1983

Merrell Research Center, Cincinnati, U.S.A. 1983

Division of Hematology-Oncology, University of Virginia, Charlottesville, U.S.A.
1983

The Population Council, Rockefeller University, New York, U.S.A.
1983

Ciba-Geigy Ltd, Basle, Switzerland 1986

Institute of Bioorganic Chemistry, Siberian Branch of U.S.S.R. Academy of Sciences,
Novosibirsk, U.S.S.R. 1986

Ciba-Geigy Ltd, Basle, Switzerland 1988

Roswell Park Memorial Institute, Buffalo, U.S.A. 1988

Ciba-Geigy Ltd, Basle, Switzerland 1991

Ciba Ltd, Basle, Switzerland 1993

TEACHING EXPERIENCE:

Doctoral theses supervised:

Hannu Pöyö: Regulation of L-ornithine and S-adenosyl-L-methionine
decarboxylase in eukaryotic organisms, University of Helsinki 1976

Pekka Hannonen: Synthesis of polyamines in rat tissues, University
of Helsinki 1976

Erkki Hilttä: Synthesis and degradation of polyamines in rat liver,
University of Helsinki 1977

Pirkko Pulkkinen: Occurrence of diamine oxidase, spermine, spermidine and

10

putrescine in seminal plasma and the influence of spermine on spermatozoal metabolism, University of Helsinki 1978

Arja Kallio: Diamine-induced inhibition of mammalian ornithine decarboxylase and of polyamine accumulation, University of Helsinki 1979

Kirsti Käpyaho: Polyamines in mammalian reproductive physiology, University of Helsinki 1980

Leena Alhonen-Hongisto: Metabolic consequences of polyamine deprivation, University of Helsinki 1980

Pauli Seppänen: Polyamine antimetabolites as antiproliferative and chemotherapeutic agents, University of Helsinki 1982

Ari Hirvonen: Expression and amplification of ornithine decarboxylase gene in mammalian cells, University of Kuopio 1989

Hannu Elo: Bis(amidinohydrazones) ["bis(guanylihydrazones)] as antineoplastic agents, University of Helsinki 1989

Pirjo Nikula: Bis(guanylihydrazone)-Induced changes in polyamine metabolism and mitochondrial function, University of Helsinki 1990

Jarmo Wahlfors: The human ornithine decarboxylase gene: Structure and methylation, University of Kuopio 1992

Maria Halmekylä: Expression of the human ornithine decarboxylase gene in transgenic mice, University of Kuopio 1993

Teija Paura: Generation of transgenic cattle from microinjected embryos produced *in vitro*, University of Kuopio 1994

Biochemistry and molecular biology courses on:

Molecular Biology and Gene Technology
Basic Biochemistry
Cell culture techniques
Enzyme regulation
Enzymology